TL70 Multicolor Tower Light Module

Datasheet

Models

TL70 Multicolor Segments

<table>
<thead>
<tr>
<th>Housing Color</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>R</td>
</tr>
</tbody>
</table>

Example Models:
- SG-TL70-GYR (3 color: green, yellow, red)
- SG-TL70-GR (2 colors: green, red)
- SG-TL70-GY (2 colors: green, yellow)

For more information regarding TL70 Modular Tower Light Final Assemblies, refer to the following documents:
- TL70 Modular Tower Light Final Assembly Datasheet (p/n 182214)
- TL70 Wireless Modular Tower Light Datasheet (p/n 185469)
- TL70 Modular Tower Light Final Assembly For AC Datasheet (p/n 191349)

Configuring the Module

<table>
<thead>
<tr>
<th>Assembly Options</th>
<th>DIP Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Module Flash Rate</td>
<td>1</td>
</tr>
<tr>
<td>3 Hz</td>
<td>ON</td>
</tr>
<tr>
<td>1.5 Hz</td>
<td>ON</td>
</tr>
<tr>
<td>Solid On*</td>
<td>OFF</td>
</tr>
</tbody>
</table>

* Factory default setting

Wiring Diagrams

PNP Input

M12 Male Pinouts

<table>
<thead>
<tr>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = brown</td>
</tr>
<tr>
<td>2 = white</td>
</tr>
<tr>
<td>3 = blue</td>
</tr>
<tr>
<td>4 = black</td>
</tr>
<tr>
<td>5 = gray</td>
</tr>
</tbody>
</table>

C1M1 = Color 1 Module 1
C2M1 = Color 2 Module 1
C3M1 = Color 3 Module 1
M2 = Module 2
Specifications

Supply Voltage and Current
12 V dc to 30 V dc
Indicators - Maximum current per LED color:
Blue, Green, White: 420 mA at 12 V dc; 150 mA at 30 V dc
Red, Yellow: 285 mA at 12 V dc; 120 mA at 30 V dc

Supply Protection Circuitry
Protected against transient voltages

Indicator Response Time
Off Response: 150 µs (maximum) at 12 V dc to 30 V dc
On Response: 180 ms (maximum) at 12 V dc; 50 ms (maximum) at 30 V dc

Indicator Characteristics

<table>
<thead>
<tr>
<th>Color</th>
<th>Dominant Wavelength (nm) or Color Temperature (CCT)</th>
<th>Lumen Output (Typical at 25° C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>525 nm</td>
<td>92</td>
</tr>
<tr>
<td>Red</td>
<td>625 nm</td>
<td>40</td>
</tr>
<tr>
<td>Yellow</td>
<td>590 nm</td>
<td>22</td>
</tr>
<tr>
<td>Blue</td>
<td>470 nm</td>
<td>32</td>
</tr>
<tr>
<td>White</td>
<td>5000 K</td>
<td>125</td>
</tr>
</tbody>
</table>

Construction
Bases, segments, covers: polycarbonate

Indicators
2 or 3 colors depending on model: Green, Red, Yellow, Blue, and White
Flash rates: 1.5 Hz ±10% and 3 Hz ±10%
LEDs are independently selected

Operating Conditions
-40 °C to +50 °C (–40 °F to +122 °F)
95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating
IEC IP65

Vibration and Mechanical Shock
Vibration 10 Hz to 55 Hz 0.5 mm p-p amplitude per IEC 60068-2-6
Shock 15G 11 ms duration, half sine wave per IEC 60068-2-27

Required Overcurrent Protection

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.
Supply wiring leads < 24 AWG shall not be spliced.
For additional product support, go to www.bannerengineering.com.

<table>
<thead>
<tr>
<th>Supply Wiring (AWG)</th>
<th>Required Overcurrent Protection (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>5.0</td>
</tr>
<tr>
<td>22</td>
<td>3.0</td>
</tr>
<tr>
<td>24</td>
<td>2.0</td>
</tr>
<tr>
<td>26</td>
<td>1.0</td>
</tr>
<tr>
<td>28</td>
<td>0.8</td>
</tr>
<tr>
<td>30</td>
<td>0.5</td>
</tr>
</tbody>
</table>

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